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EXAMINER	
YAGER, JAMES C	
ART UNIT	PAPER NUMBER
1794	
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03/30/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/553,188	LIGTENBERG ET AL.	
	Examiner	Art Unit	
	JAMES YAGER	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 February 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5-11,13-17,19 and 20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3, 5-11, 13-17, 19 and 20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 17 February 2009 has been entered.

Response to Amendment

2. The amendment filed 17 February 2009 has been entered, claims 1-3, 5-11, 13-17, 19 and 20 are pending in the application.

Claim Objections

3. Claims 6 and 19 are objected to because of the following informalities: It appears that the word "or" should be between "glass nonwoven" and "a woven glass fibre fabric"; and between "glass nonwoven" and "a woven E-glass fibre fabric". Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-3, 5-11, 13-17, 19 and 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant does not provide any support for outer sheath reinforcing layer and examiner has not found any support for outer sheath reinforcing layer. There does not appear to be support for the recitation of "continuous" given that this term is not mentioned or defined in the specification. Although applicant points to the drawings for support, it is not clear how this provides support for reciting "continuous". Applicant does not point to any support and examiner did not find any support for the recitation that the trickle guard is wound "fully" circumferentially given that while there is support to recite that the reinforcing layer is arranged over the entire circumference (P5/L7), there is no support to recite that the reinforcing layer is wound fully circumferentially around said pipe sleeve.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-3, 5-11, 13-17, 19 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1, 9 and 13, the phrase "trailing end" renders the claims indefinite because it is unclear what portion of the nonwoven web is considered to be the "trailing end" - the last 1/4 of the layer, the last 1/10 of the layer?

Regarding claims 1, 9 and 13, the term "continuous" renders the claims indefinite because it is unclear what is meant by this term.

Regarding claim 13, it is not clear how a pipe sleeve can comprise a continuous nonwoven web, i.e. while the pipe sleeve can be made from a continuous web, it is not clear how the pipe sleeve itself has a continuous web.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 1, 2, 6-10, 14, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin-Ehret-Hill Inc. (GB 1214330), in view of Seitz (GB 2032845).

Regarding claims 1, 2, 6, 7 and 19, Baldwin-Ehret-Hill Inc. discloses a process for producing pipe sleeves (P1/L10-15, laminated pipe covering) made of mineral wool (P3/L35-40) for insulating pipelines or for reducing the sound level in pipeline systems, comprising the following steps: a) providing a nonwoven web made of mineral wool which is provided with an uncured binder (P3/L80-85), b) winding up the nonwoven web on a winding mandrel of a winder (P3/L30-35), c) curing the binder (P4/L15-20), characterized in that at least one reinforcing layer is provided before the nonwoven web runs into the winder, in such a way that during the winding the said reinforcing layer becomes a constituent part of the pipe sleeve produced as a result (P3/L35-40, P3/L55-60), characterized in that the at least one reinforcing layer is applied to the nonwoven

web in such a way that it is wound up with it and, following winding, is present within the pipe sleeve (P3/L30-40), characterized in that the reinforcing layer is a glass nonwoven, a woven glass fiber fabric (P3/L35-40, nonwoven glass fiber), characterized in that the reinforcing layer is wetted with additional binder before being provided for the winding operation (P3/L79-85).

Since no binder is recited as being present in the reinforcing layer other than the "additional binder" recited in claim 7, and the only other recitation of binder in the claims preceding claim 7 is the binder in the nonwoven web, it is the examiner's position that the binder recited in claim 7 is "additional" to the binder present in the nonwoven web. Given that both the reinforcing layer and nonwoven layer of BEH have binder in them, it is clear that the binder present in the reinforcing layer of BEH is "additional" to the binder present in the nonwoven layer and therefore meets the limitation of "additional binder".

Given the broad recitation that the reinforcing layer is *provided* before the nonwoven web runs into the winder, thereby providing said one reinforcing layer before inclusion of the nonwoven web in the pipe sleeve, and given that the reinforcing layer of BEH must be present (i.e. provided) before either the reinforcing layer or the nonwoven web are formed into (i.e. run into the winder; inclusion of the nonwoven web) the pipe sleeve, it is the examiner's position that the BEH reference clearly meets the limitation that the process comprises providing the reinforcing layer before inclusion of the nonwoven web in the pipe sleeve.

Baldwin-Ehret-Hill Inc. does not disclose providing an outer sheath reinforcing layer added to the trailing end of the nonwoven web after providing the reinforcing layer in such a way that said outer sheath reinforcing layer comes to lie on the outside of the pipe sleeve with the effect of a lamination, as an outer layer, the outer sheath reinforcing layer arranged around the full circumference.

Seitz discloses a process for making an insulating shell for thermal insulation of pipelines (i.e. a pipe sleeve) (P2/L1-5), comprising rock wool (i.e. mineral wool) having an outer layer of glass wool (i.e. an outer sheath reinforcing layer) (P2/L10-16). Seitz discloses that the outer layer of glass wool layer is produced by coiling the outer layer of glass wool layer on a mandrel after coiling on the inner rock wool layer (i.e. added after providing the inner layer in such a way that said outer sheath reinforcing layer comes to lie on the outside of the pipe sleeve with the effect of lamination, as an outer layer) (P1/L117-125). It is clear from Figure 1 that the outer layer is arranged around the full circumference. Seitz discloses that the outer layer of glass wool improves the rigidity and substantially facilitates handling (P2/L13-15). It is clear that since the outer layer is made of the same material and has the same structure as the instantly claimed trickle guard, it is inherently a trickle guard.

Baldwin-Ehret-Hill Inc. and Seitz are analogous art because they both teach about making pipe sleeves. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the step of adding the outer layer of Seitz into the process of making the pipe sleeve of Baldwin-Ehret-Hill Inc. to provide a pipe sleeve that has improved rigidity and is easier to handle.

Given the broad recitation in claim 1 that the outer sheath reinforcing layer is added to the trailing end of the nonwoven web, and given that the outer layer of the pipe sleeve produced by the process of modified BEH will be wrapped around the nonwoven web, it is the examiner's position that the outer sheath reinforcing layer of modified BEH is added to the trailing end of the non woven web.

Regarding claim 8, modified Baldwin-Ehret-Hill Inc. discloses all of the claim limitations as set forth above. Baldwin-Ehret-Hill Inc. further discloses a pipe sleeve (P3/L35-45) made of mineral wool for insulating pipelines or for reducing the sound level in pipeline systems, the pipe sleeve being formed of a wound nonwoven web with cured binder produced by means of a process according to claim 1 (P3/L30-40, P3/L80-85).

Regarding claims 9, 10, and 14, Baldwin-Ehret-Hill Inc. discloses a pipe sleeve (P3/L20-30) made of mineral wool for insulating pipelines, the pipe sleeve being formed of a wound continuous nonwoven web with cured binder, at least one reinforcing layer on the inner side of the pipe and/or enclosed at at least part of the boundary between successive wound layers (P3/L20-40, P3/L75-85, Fig. 2), characterized in that the reinforcing layer is enclosed within the wound layers (Fig. 2), characterized in that the reinforcing layer is a glass nonwoven, a woven glass fiber fabric, (P3/L35-40, nonwoven glass fiber), the reinforcing layer comprising means for allowing separation of wound layers in order to reduce external or internal diameter of the pipe (P3/L40-45, slit).

Baldwin-Ehret-Hill Inc. does not disclose an outer reinforcing sheath layer in the form of a trickle guard added to a trailing end of the continuous nonwoven web wound fully circumferentially around the continuous nonwoven web with a leading end of the

outer sheath reinforcing layer overlapping the trailing end of the continuous nonwoven web.

Seitz discloses an insulating shell for thermal insulation of pipelines (i.e. a pipe sleeve) (P2/L1-5), comprising rock wool (i.e. mineral wool) having an outer layer of glass wool (i.e. an outer sheath reinforcing layer) (P2/L10-16). Seitz discloses that the outer layer of glass wool layer is produced by coiling the outer layer of glass wool layer on a mandrel after coiling on the inner rock wool layer (i.e. wound fully circumferentially around the continuous nonwoven web with a leading end of the outer sheath reinforcing layer overlapping the trailing end of the continuous nonwoven web) (P1/L117-125). It is clear from Figure 1 that the outer layer is arranged around the full circumference. Seitz discloses that the outer layer of glass wool improves the rigidity and substantially facilitates handling (P2/L13-15). It is clear that since the outer layer is made of the same material and has the same structure as the instantly claimed trickle guard, it is inherently a trickle guard.

Baldwin-Ehret-Hill Inc. and Seitz are analogous art because they both teach about pipe sleeves. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the step of adding the outer layer of Seitz into the process of making the pipe sleeve of Baldwin-Ehret-Hill Inc. to provide a pipe sleeve that has improved rigidity and is easier to handle.

Given the broad recitation in claim 9 that the outer sheath reinforcing layer is added to the trailing end of the nonwoven web, and given that the outer layer of the pipe sleeve of modified BEH is will be wrapped around the nonwoven web, it is the

examiner's position that the outer sheath reinforcing layer of modified BEH is added to the trailing end of the non woven web.

Alternatively, although modified BEH does not specifically disclose that the outer sheath reinforcing layer is added to the trailing end of the nonwoven web as claimed, it is noted that "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process", *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) . Further, "although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product", *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir.1983). See MPEP 2113.

12. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin-Ehret-Hill Inc. (GB 1214330) in view of Seitz (GB 2032845), as applied to claim 1 above, in view of Hofmann (US 3,824,140).

Regarding claim 5, modified Baldwin-Ehret-Hill Inc. discloses all of the claim limitations as set forth above. Baldwin-Ehret-Hill Inc. does not disclose that the reinforcing layer is applied to the mandrel before the winding of the nonwoven web in such a way that it provides the inner surface of the pipe sleeve determining the clear internal diameter of the pipe sleeve. Hofmann discloses a process for producing pipe

sleeves for insulating pipelines comprising a) providing a nonwoven web (C2/L40-45) b) winding up the nonwoven web on a winding mandrel of a winder (C3/L40-50), characterized in that at least one reinforcing layer is provided (C1/L45-50, metal foil layer) before the nonwoven web runs into the winder, in such a way that during the winding the said reinforcing layer becomes a constituent part of the pipe sleeve produced as a result (Fig. 3). Hofmann further discloses that the reinforcing layer is applied to the mandrel before the winding of the nonwoven web in such a way that it provides the inner surface of the pipe sleeve determining the clear internal diameter of the pipe sleeve (Fig. 3).

Baldwin-Ehret-Hill Inc., Seitz and Hofmann are analogous art because they all teach about processes of producing pipe sleeves comprising winding up nonwoven webs and reinforcing layers on a winding mandrel of a winder. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the reinforcing layer to the mandrel before the winding of the nonwoven web in such a way that it provides the inner surface of the pipe sleeve determining the clear internal diameter of the pipe sleeve as described by Hofmann in the process of modified Baldwin-Ehret-Hill Inc. to provide a pipe sleeve that is reinforced on the innermost surface to maintain the structural integrity of the innermost surface. Doing so would amount to nothing more than a use of a known method step for its intended use in a known environment to accomplish entirely expected result.

13. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin-Ehret-Hill Inc. (GB 1214330) in view of Seitz (GB 2032845), as applied to claim 2 above, in view of Roth (US 5,056,564).

Regarding claim 3, modified Baldwin-Ehret-Hill Inc. discloses all of the claim limitations as set forth above. Baldwin-Ehret-Hill Inc. discloses that the reinforcing layer is placed on the nonwoven web and is then wound up together with the latter (P3/L35-40, P3/L55-60). Baldwin-Ehret-Hill Inc. does not disclose that the reinforcing layer comprises a plurality of separate strips. Roth discloses a process for producing pipe sleeves (C1/L10-15) comprising a) providing a nonwoven web made of mineral wool (C1/L15-16) b) winding up the nonwoven web on a winding mandrel of a winder, characterized in that at least one reinforcing layer is provided before the nonwoven web runs into the winder, in such a way that during the winding the said reinforcing layer becomes a constituent part of the pipe sleeve produced as a result (C1/L15-20). Roth discloses that the reinforcing layer comprises a plurality of separate strips (C2/L40-52, bracing strips). Roth further discloses that providing the reinforcing layer in strips provides helps the sleeve to conform to the surface of the pipe (C2/L40-60).

Baldwin-Ehret-Hill Inc., Seitz, and Roth are analogous art because they both teach about processes of producing pipe sleeves comprising winding up nonwoven webs and reinforcing layers on a winding mandrel of a winder. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the reinforcing layer in the form of strips as taught by Roth in the process of

modified Baldwin-Ehret-Hill Inc. to provide a process of making a pipe sleeve wherein the sleeve more easily conforms to the shape of the pipe.

14. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin-Ehret-Hill Inc. (GB 1214330) in view of Seitz (GB 2032845), as applied to claim 9 above, in view of Roth (US 5,056,564).

Regarding claim 11, modified Baldwin-Ehret-Hill Inc. discloses all of the claim limitations as set forth above. Baldwin-Ehret-Hill Inc. does not disclose that the reinforcing layer comprises a plurality of separate strips.

Roth discloses a pipe sleeve (Fig. 3) made of mineral wool (C2/L40-45) with at least one reinforcing layer (C2/L49-52, bracing strips). Roth further discloses that providing the reinforcing layer in strips helps the sleeve to conform to the surface of the pipe (C2/L40-60).

Baldwin-Ehret-Hill Inc. and Roth are analogous art because they both teach about pipe sleeves made of mineral wool comprising nonwoven webs and reinforcing layers. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the reinforcing layer in the form of strips as taught by Roth in the pipe sleeve of Baldwin-Ehret-Hill Inc. to provide a pipe sleeve wherein that more easily conforms to the shape of the pipe.

15. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lauren (US 4,576,206) in view of Seitz (GB 2032845).

Regarding claim 13, Lauren discloses a pipe sleeve made of mineral wool (C1/L10-16), characterized in that it has at least one reinforcing layer (C2/L33-36)

which provides the inner surface of the pipe sleeve that determines the clear internal diameter of the pipe sleeve (Fig. 1) and a main layer of mineral wool (i.e. a continuous nonwoven web made of mineral wool) (C2/L1-10). Lauren does not disclose a reinforcing layer in the form of a trickle guard would circumferentially around it.

Seitz discloses an insulating shell for thermal insulation of pipelines (i.e. a pipe sleeve) (P2/L1-5), comprising rock wool (i.e. mineral wool) having an outer layer of glass wool (i.e. an outer sheath reinforcing layer reinforcing layer in the form of a trickle guard wound circumferentially around the continuous nonwoven web with a leading end of the outer sheath reinforcing layer overlapping the trailing end of the continuous nonwoven web; the outer sheath provided as a glass nonwoven fabric) (P2/L10-16). Seitz discloses that the outer layer of glass wool improves the rigidity and substantially facilitates handling (P2/L13-15). It is clear that since the outer layer is made of the same material and has the same structure as the instantly claimed trickle guard, it is inherently a trickle guard.

Lauren and Seitz are analogous art because they both teach about pipe sleeves. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the outer layer of Seitz into the pipe sleeve of Lauren to provide a pipe sleeve that has improved rigidity and is easier to handle.

The recitation that the pipe sleeve is for sound-level reduction in pipeline systems, in particular of heating installations or ventilation systems, does not confer patentability to the claim since the recitation of an intended use does not impart

patentability to otherwise old compounds or compositions. *In re Tuominen*, 671 F.2d 1359, 213 USPQ 89 (CCPA 1982).

16. Claims 9, 15, 16 and 20, are rejected under 35 U.S.C. 103(a) as being unpatentable over Blau et al. (US 3,346,016) in view of Seitz (GB 2032845) and Baldwin-Ehret-Hill Inc. (GB 1214330).

Regarding claims 9, 15, 16 and 20, Blau discloses a pipe sleeve (C2/L19-25) made of mineral wool (C4/L15-16) for insulating pipelines, the pipe sleeve being formed of a wound continuous nonwoven web with cured binder (C4/L10-25, C5/L60-65, C6/L1-5), characterized in that there is at least one reinforcing layer (C5/L64-66, aluminum foil) enclosed at at least part of the boundary between successive wound layers (C5/L55-70), characterized in that the reinforcing layer contains particulate material (C4/L30-35), characterized in that the reinforcing layer includes a foil material (C4/L70-75). Blau does not disclose an outer sheath reinforcing layer in the form of a trickle guard added to a trailing end of the continuous nonwoven web and wound fully circumferentially around the continuous nonwoven web with a leading end of the outer sheath reinforcing layer overlapping the trailing end of the continuous nonwoven web.

Seitz discloses an insulating shell for thermal insulation of pipelines (i.e. a pipe sleeve) (P2/L1-5), comprising rock wool (i.e. mineral wool) having an outer layer of glass wool (i.e. outer sheath reinforcing layer in the form of a trickle guard added to a trailing end of the continuous nonwoven web and wound fully circumferentially around the continuous nonwoven web with a leading end of the outer sheath reinforcing layer overlapping the trailing end of the continuous nonwoven web) (P2/L10-16). Seitz

discloses that the outer layer of glass wool improves the rigidity and substantially facilitates handling (P2/L13-15). It is clear that since the outer layer is made of the same material and has the same structure as the instantly claimed trickle guard, it is inherently a trickle guard.

Blau and Seitz are analogous art because they both teach about pipe sleeves. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the outer layer of Seitz into the pipe sleeve of Blau to provide a pipe sleeve that has improved rigidity and is easier to handle.

Neither Blau or Seitz disclose that the reinforcing layer comprises a means for allowing separation of wound layers in order to reduce external or internal diameter of the pipe.

BEH discloses a pipe sleeve (P3/L20-30) comprising a reinforcing layer (P3/L20-40, P3/L75-85, Fig. 2), and having a slit so that it may be opened to facilitate assembly to a conduit (i.e. the reinforcing layer comprising means for allowing separation of wound layers in order to reduce external or internal diameter of the pipe) (P3/L40-45).

Blau, Seitz and BEH are analogous art because they all teach about pipe sleeves. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the slit of BEH into the pipe sleeve of modified Blau so that it may be opened to facilitate assembly to a conduit.

Given the broad recitation in claim 9 that the outer sheath reinforcing layer is added to the trailing end of the nonwoven web and wound fully circumferentially around the continuous nonwoven web with a leading end of the outer sheath reinforcing layer

overlapping the trailing end of the continuous nonwoven web, and given that the outer layer of the pipe sleeve of modified Blau is will be wrapped around the nonwoven web, it is the examiner's position that the outer layer of modified Blau is added to the trailing end of the non woven web and wound fully circumferentially around the continuous nonwoven web with a leading end of the outer sheath reinforcing layer overlapping the trailing end of the continuous nonwoven web.

Alternatively, since claim 9 is drawn to a pipe sleeve, although modified Blau does not specifically disclose that the mat is continuous as claimed or that the outer sheath reinforcing layer is added to the trailing end of the nonwoven web and wound fully circumferentially around the continuous nonwoven web with a leading end of the outer sheath reinforcing layer overlapping the trailing end of the continuous nonwoven web, it is noted that "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process", *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) . Further, "although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product", *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir.1983). See MPEP 2113.

17. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin-Ehret-Hill Inc. (GB 1214330) in view of Seitz (GB 2032845), as applied to claim 9 above, in view of Hartranft et al. (US 5,457,136).

Regarding claim 17, modified Baldwin-Ehret-Hill Inc. discloses all of the claim limitations as discloses above. Modified Baldwin-Ehret-Hill Inc. does not disclose that the reinforcing layer is treated with a biocide agent. Hartranft et al. discloses a pipe sleeve (C2/L45-5) comprising a reinforcing layer (C3/L65-67) that is treated with a biocide to impart bacterial or fungal resistance to the sleeve (C8/L1-10).

Baldwin-Ehret-Hill Inc. and Hartranft et al. are analogous art because they both teach about pipe sleeves comprising reinforcing layers. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to add biocide to the reinforcing layer as taught by Hartranft et al. in the pipe sleeve of Baldwin-Ehret-Hill Inc. to provide a pipe sleeve that is resistant to bacteria or fungi.

Response to Arguments

18. Applicant's arguments with respect to claims 9, 10 and 14 under 35 USC §102(b) have been considered but are moot in view of the new ground(s) of rejection.

19. Applicant's arguments filed 17 February 2009 have been fully considered but they are not persuasive. Applicant argues:

The earlier-submitted amendment to claim 9 clarified that the nonwoven web is provided continuously, as supported in the original specification and figures, further reinforced through the use of first and second supply belts and a winding mandrel. These features remain in claim 9 in its present form. Significantly, the specification of the presently claimed subject matter does not

disclose the use of mats of material. Indeed, mats of material would not be easily implemented on such mechanisms without additional control systems, etc. Thus, *B-E-H* is at least deficient for the reason that it fails to disclose, teach or suggest the particular features in association with "the pipe sleeve formed of a wound continuous nonwoven web with cured binder", as set forth in amended claim 9.

Given that a web is a sheet and that a mat is a sheet, it is the examiner's position that a mat is a web, absent evidence to the contrary.

It is the examiner's position that the mats of modified BEH and modified Blau are continuous given that they are uninterrupted sheets.

Although modified BEH and modified Blau do not specifically disclose that the pipe sleeve is formed of a wound continuous nonwoven web as claimed, it is noted that "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process", *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) . Further, "although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product", *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir.1983). See MPEP 2113.

Therefore, absent evidence of criticality regarding the presently claimed pipe sleeve being formed of a wound continuous nonwoven web and given that modified BEH and modified Blau meet the requirements of the claimed pipe sleeve, modified BEH and modified Blau clearly meet the requirements of present claim 9.

20. Applicant's arguments filed 17 February 2009 have been fully considered but they are not persuasive. Applicant argues:

> In addition, claim 9 now specifies that the "... an outer sheath reinforcing layer... [is] ... added to a trailing end of the continuous nonwoven web and wound fully circumferentially ... with a leading end of the outer sheath reinforcing layer overlapping the trailing end of the continuous nonwoven web ..." As the Examiner pointed out in the Advisory Action (§ 10 of the Advisory Action), the features upon which Applicants rely should be recited in the claims. The Examiner further pointed out (also in § 10 of the Advisory Action) that the broad disclosure of "trailing end" allegedly is disclosed by the cited art, at least in its broadest sense. It is submitted that the claim descriptions as now clearly set forth the claimed features.

This argument is moot, since in light of the amendment of the claim to include an outer sheath reinforcing layer, claim 9 is now rejected under 35 USC §103 using Seitz as a secondary reference teaching the outer sheath reinforcing layer. See paragraph 7 above.

21. Applicant's arguments filed 17 February 2009 have been fully considered but they are not persuasive. Applicant argues:

> Accordingly, the claims clearly distinguish Applicants' subject matter over the cited art, as suggested by the Examiner. In particular, the "... leading end of the outer sheath reinforcing layer overlapping the trailing end of the continuous nonwoven web ..." is neither shown nor suggested in any combination of the cited art.

Given the broad disclosure of "trailing end" and given that the continuous nonwoven web of modified BEH has a trailing end and the outer sheath reinforcing layer of modified BEH has a leading end and given that the outer sheath reinforcing layer is wrapped around the continuous nonwoven web, it is the examiner's position that the leading end of the outer sheath reinforcing layer does overlap the trailing end of the continuous nonwoven web.

22. Applicant's arguments filed 17 February 2009 have been fully considered but they are not persuasive. Applicant argues:

Additionally, Applicants note that according to this reference, the process starts with two mats superimposed with each other. Applicants respectfully submit that if one were to put a couple of mats onto a mandrel and wind it thereon revolution by revolution, it is clear to someone of ordinary skill in the art that, because of the different diameters acting on each of the mats, the trailing ends thereof will not rest on the same place at the outside of the finished sleeve.

In other words, the trailing end of the outer layer will rest at the sleeve body at a position where the trailing end of the inner layer is not reached. Thus, the outer layer of such construction

typically does not completely surround the roll; and consequentially the second layer will be exposed from the outside.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., that the outer layer of the construction completely surrounds the roll so that the second layer is not visible from the outside) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

23. Applicant's arguments filed 17 February 2009 have been fully considered but they are not persuasive. Applicant argues:

Claim 9 also now includes that the reinforcing layer is provided with means for allowing separation of wound layers in order to reduce external or internal diameter of the pipe. With respect to this feature, found in cancelled claim 18, and rejected in the Final Office Action over *B-E-H,* Applicants respectfully point out that claims clearly distinguish over *B-E-H*. Applicants note that although the Examiner has cited page 3, lines 40-45, the "slit" *of B-E-H* as disclosing such features of previously presented claim 18. This reference to "slit" *of B-E-H* could be either "a longitudinally extending slit 12 through the sidewall" or "a partial slit 14 diametrically opposed therefrom" both of which divide the pipe cover in halves 10a and 10b connected by a hinge 16 so that it may be opened as illustrated in Figure 4. In either case, the slit may reduce external circumference of the pipe in that the pipe becomes halved, but with respect to the diameter of the pipe itself, neither an external nor internal diameter is reduced as a result.

Further, it is pointed out that the provision of a "slit" precludes the use of a design in which the outer layer is "wound fully circumferentially around the continuous nonwoven web". The entire purpose of a slit is to' enable the insulation to be positioned after the pipe is installed. The worker must accommodate the slit, typically by use of additional tape or adhesive.

Also, Applicants note that no explicit teaching is given in *B-E-H* to provide a reinforcing layer at the outer circumferentially side of a sleeve body which is wound all around thereof (to use the language of claim 9, "wound fully' circumferentially around the continuous nonwoven

web"). Moreover, no teaching is given that such outer layer may act as a trickle guard. It is further pointed out that the feature of the reinforcing layer wound fully circumferentially around the pipe is necessarily absent, due to the presence of the slits of *B-E-H*.

Given the broad recitation that the means "is for allowing separation of wound layers in order to reduce external or internal diameter of the pipe" it is clear that a slit would "allow" one to reduce the internal or external diameter of the pipe by allowing one to roll one end at the slit under the other end, thereby decreasing the diameter of the pipe.

Given that the reinforcing layer itself is wound fully around the pipe (Fig. 2), it is clear that it meets the limitations of claim 9. Although there is a slit in the pipe sleeve, there is no gap between the halves of the pipe sleeve and the two halves meet each other (Fig. 3). Therefore, the slits do not change the fact that the reinforcing layer is wound fully circumferentially around the pipe.

It is clear that since the reinforcing layer is made of the same material and has the same structure as the instantly claimed trickle guard, it is inherently a trickle guard.

24. Applicant's arguments filed 17 February 2009 have been fully considered but they are not persuasive. Applicant argues:

As discussed above, Applicants respectfully submit that B-E-H fails to disclose, teach or suggest "providing a continuous nonwoven web made of mineral wool" as recited in amended claim 1.

Further to the presently claimed subject matter, *BEH* is not fully enabling to disclose, teach or suggest that "... providing at least one reinforcing layer before the nonwoven web runs into the winder ..." as recited in independent claim 1. The Examiner has cited page 3, lines 35-40 and page 3, lines 55-60 *of B-E-H* as supporting such disclosure, but lines 35-40 disclose only that "the outer layer Lf and every other layer being made of glass fibre and the intermediate layers Lm between the glass fibre layers being made of mineral wool." Thus, *B-E-H* merely discloses that the outer layer and "every other layer" is made of a glass fibre, but does not discuss the composition of the inner most layer. Accordingly, *B-E-H* suggests that the composition of the inner most layer depends on whether the number of layers is odd or even. Applicants do not understand the applicability of the citation of lines 55-60 *of B-E-H*, which discuss the density of the finished cover and a comparison to "straight glass fibres," both elements that are not discussed in this portion of claim 1.

Given the broad recitation that the reinforcing layer is *provided* before the nonwoven web runs into the winder, thereby providing said one reinforcing layer before inclusion of the nonwoven web in the pipe sleeve, and given that the reinforcing layer of BEH must be present (i.e. provided) before either the reinforcing layer or the nonwoven web are formed into (i.e. run into the winder; inclusion of the nonwoven web) the pipe sleeve, it is the examiner's position that the BEH reference clearly meets the limitation that the process comprises providing the reinforcing layer before inclusion of the nonwoven web in the pipe sleeve.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., that the "innermost" layer is the reinforcing layer) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

25. Applicant's arguments filed 17 February 2009 have been fully considered but they are not persuasive. Applicant argues:

> Admittedly, *B-E-H* does not disclose "that the reinforcing layer is added to the trailing end of the nonwoven web" as recited in independent claim 1. Applicants note that the Examiner agrees that *B-E-H* does not disclose the features of claim 1 according to which the reinforcing
>
> layer is added to the trailing end of the nonwoven web. In this regard, he specifically refers to *Blau*, asserting that such a feature is disclosed in column 5, lines 55-65. Applicants respectfully disagree with the Examiner. Applicants agree that *Blau* teaches to roll a glass fiber felt on a mandrel, but disagree with the Examiner's interpretation that *Blau* teaches "that at least one reinforcing layer is provided *before* the nonwoven web runs into the winder" (emphasis added) as recited in Applicants' claim 1. However, *Blau* discloses (col. 5, lines 62-66) that "upon completion of the first revolution an aluminum foil will be inserted between the convolutions of the fiber felt with continuing the wrapping of the foil until five complete continuous spirals of foil are formed ... whereupon the inclusion of the foil was terminated and the convoluting of glass fiber was continued..." (emphases added). This construction is shown in the figure of

Blau, wherein the metal foil. is indicated by reference numeral 3 as described in col. 5, lines 33-47 of *Blau*.

Hence, there is not only *no* disclosure in *Blau* to add a reinforcing layer before the inclusion of nonwoven web in the pipe sleeve, but there is also no disclosure to add a reinforcing layer to the trailing end of the nonwoven web. In addition, *Blau* does not disclose a pipe sleeve having a reinforcing layer arranged around the full circumference of the sleeve body.

Therefore, Applicants respectfully submit that *Blau* fails to cure the deficiencies of *B-E-H* with respect to independent claim 1.

This argument is now moot in light of the new grounds of rejection presented for claim 1, necessitated by the addition of the outer sheath reinforcing layer. Additionally, this argument does not apply to currently presented claim 1 because claim 1 now recites that the outer sheath reinforcing layer (**not** the reinforcing layer) is added to the trailing end of the nonwoven web.

26. Applicant's arguments filed 17 February 2009 have been fully considered but they are not persuasive. Applicant argues:

Applicants assert that the claims dependent from claim 1 have additional patentable features, notwithstanding. For example, with respect to dependent claim 7, Applicants respectfully disagree with the Examiner's citation of page 3, lines 80-85 of *B-E-H* as disclosing "that the reinforcing layer is wetted with additional binder before being provided for the winding operation." These sections of *B-E-H* discuss "mineral wool impregnated with a suitable

thermosetting binder," which is notably not a reinforcing layer. A few lines prior, *B-E-H* describes "glass fibre impregnated with a suitable thermosetting binder," but does not in any way suggest "that the reinforcing layer is wetted with additional binder." Thus, for at least this reason, *B-E-H* fails to teach, disclose or suggest the features of dependent claim 7.

Since no binder is recited as being present in the reinforcing layer other than the "additional binder" recited in claim 7, and the only other recitation of binder in the claims preceding claim 7 is the binder in the nonwoven web, it is the examiner's position that the binder recited in claim 7 is "additional" to the binder present in the nonwoven web. Given that both the reinforcing layer and nonwoven layer of BEH have binder in them, it is clear that the binder present in the reinforcing layer of BEH is "additional" to the

binder present in the nonwoven layer and therefore meets the limitation of "additional binder".

27. Applicant's arguments filed 17 February 2009 have been fully considered but they are not persuasive. Applicant argues:

With respect to dependent claim 5, rejected by the Examiner under 35 U.S.C. §103(a) as allegedly unpatentable over *B-E-H* in view *of Blau,* as applied to claim 1 above, in view of *Hofmann,* Applicants submit that *Hofmann* fails to cure the deficiencies of the combination of *B-E-H* and *Blau* with respect to independent claim 1, as discussed above. For example, *Hofmann* again discusses a split pipe sleeve, thereby unable to provide at least a "last layer arranged around the full circumference" as recited in Applicants' present claims. *Hofmann* even discusses that an additional "thin insulating layer 26 is inserted between the confronting faces of the sheath..." thereby further making it impossible for a "last layer to be arranged around the full circumference" as recited in Applicants' independent claim 1.

Additionally, Applicants respectfully submit that, while the Examiner's introduction of *Hofmann* is admittedly to address the reinforcing layer applied before the winding of the nonwoven web, *Hofmann* fails to suggest Applicants' technique. In contrast, Applicants' claim 5 "the reinforcing layer ... applied to the mandrel before the winding of the nonwoven web in such a way that it provides the inner surface of the pipe sleeve determining the clear internal diameter of the pipe sleeve" is different from the "synthetic-resin foil sleeve 24" disclosed in col. 4, lines 1-4 *of Hofmann.* This is because "the coiling mandrel is first provided with" is not of the same material as the "metal-foil layers 2~2" which allegedly provide reinforcement layers to the "insulating fabric layers 21" of *Hofmann.* It is respectfully submitted that this reaches to the *teaching* in that *Hofmann* fails to teach the very feature for which *Hofmann* is cited. Therefore there is no teaching under 35 U.S.C.'§103(a).

Thus, in addition to failing to cure the deficiencies of the previously discussed combination, *Hofmann* also fails to disclose that *"the* at least one reinforcing layer.., is applied to the winding mandrel.., said reinforcing layer provides the inner surface of the pipe sleeve determining the clear internal diameter' as there is no consistency in *Hofmann* as to which "reinforcement material" is used. Thus, for at least these reasons, the cited combination fails.

Note that while Hofmann does not disclose all the features of the present claimed invention, Hofmann is used as teaching reference, and therefore, it is not necessary for this secondary reference to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather this reference teaches a certain concept, namely that the reinforcing layer is applied to the mandrel before the winding of the

nonwoven web in such a way that it provides the inner surface of the pipe sleeve determining the clear internal diameter of the pipe sleeve, and in combination with the primary reference, discloses the presently claimed invention.

28. Applicant's arguments filed 17 February 2009 have been fully considered but they are not persuasive. Applicant argues:

With respect to claim 3, rejected by the Examiner under 35 U.S.C. §103(a) as being unpatentable over *B-E-H* in view of *Blau*, as applied to claim 2 above, in view *of Roth*, Applicants respectfully submit that *Roth* fails to cure the deficiencies of the combination of *B-E-H and Blau* with respect to amended independent claim 1, which claims 2 and 3 depend from, directly and indirectly, respectively, as discussed above.

With respect to claim 11, rejected under 35 U.S.C. §103(a) as being unpatentable over *B-E-H*, as applied to claim 9 above, in view *of Roth*, Applicants submit that *Roth* fails to cure the deficiencies of *B-E-H* with respect to amended independent claim 9, which claim 11 depends from, as discussed above.

Note that while Roth does not disclose all the features of the present claimed invention, (reference name) is used as teaching reference, and therefore, it is not necessary for this secondary reference to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather this reference teaches a certain concept, namely providing the reinforcing layer in the form of strips, and in combination with the primary reference, discloses the presently claimed invention.

29. Applicant's arguments filed 17 February 2009 have been fully considered but they are not persuasive. Applicant argues:

With respect to claim 13, rejected under 35 U.S.C. § 103(a) as being unpatentable over *Lauren* in view of *Seitz*, Applicants respectfully submit that the combination is improper and thus fails as col. 4, lines 54-64 *of Lauren* discloses that the "inner layer 3, which also consists of mineral wool" while page 2, lines 10-16 of *Seitz* discloses an "outer layer of glass wool." Thus, the combination not only fails to disclose use of the same material for the reinforcing layer, but further, fails to disclose as recited in amended claim 13, "said pipe sleeve further characterized in that the reinforcing layer is one of or a combination of a glass nonwoven or a woven glass fibre

fabric; or includes one of a particulate material, a particulate infrared radiation absorbing material or a particulate heat shielding material; or includes one of a foil material, or a heat reflective foil containing a metal; or is treated with a biocide agent."

Given that Lauren states that the term "mineral wool" is used to mean any kind of wool or mineral material such as glass wool (C1/L10-15), it is clear that Lauren discloses that the inner layer (i.e. the reinforcing layer) may be glass wool.

Given that glass wool is made of glass and is not woven, it is the examiner's position that glass wool is a glass nonwoven fabric, absent evidence to the contrary.

30. Applicant's arguments filed 17 February 2009 have been fully considered but they are not persuasive. Applicant argues:

With respect to claims 9, 15, 16 and 20, rejected by the Examiner under

35 U.S.C. § 103(a) as being unpatentable over *Blau* in view of *Seitz*, Applicants respectfully submit that *Seitz* fails to cure the deficiency discussed above of *Blau* of not disclosing a "... the pipe sleeve formed of a wound continuous nonwoven web with cured binder, at least one reinforcing layer on the inner side of the pipe ..." as recited in amended claim 9 (emphasis added), as *Blau* discloses introduction of metal foil after one rotation of the mandrel, and *Seitz*

fails to disclose a reinforcing layer on the inner side of the pipe. Further, as the pipe of Seitz comprises only two layers, of two different mineral wools, preferably one rock, one glass, *Seitz* fails to disclose "an outer sheath reinforcing layer in the form of a trickle guard added to a trailing end of the continuous nonwoven web and wound fully circumferentially around the continuous nonwoven web with" as recited in amended claim 9. In this regard, the Examiner admits he is interpreting the layer as part of the pipe sleeve, and not an additional reinforcing layer, and accordingly the reference "teaches away from" Applicants' claimed subject matter.

Finally, the combination fails to disclose the feature recited in amended claim 9 wherein "... the reinforcing layer comprising means for allowing separation of wound layers in order to reduce external or internal diameter of the pipe."

First, claim 9 does not require that the reinforcing layer is on the inside of the pipe. Claim 9 recites "at least one reinforcing layer on the inner side of the pipe **and/or** enclosed at at least part of the boundary between successive wound layers". Given the use of **and/or**, the reinforcing layer is not required to be on the inside of the pipe.

Seitz clearly discloses an outer glass wool layer which improves the rigidity and substantially facilitates handling. It is clear that since the glass wool outer layer of Seitz

is made of the same material and has the same structure as the instantly claimed trickle guard, it is inherently a trickle guard.

Given the broad recitation in claim 9 that the outer sheath reinforcing layer is added to the trailing end of the nonwoven web and wound fully circumferentially around the continuous nonwoven web with a leading end of the outer sheath reinforcing layer overlapping the trailing end of the continuous nonwoven web, and given that the outer layer of the pipe sleeve of modified Blau is will be wrapped around the nonwoven web, it is the examiner's position that the outer layer of modified Blau is added to the trailing end of the non woven web and wound fully circumferentially around the continuous nonwoven web with a leading end of the outer sheath reinforcing layer overlapping the trailing end of the continuous nonwoven web.

31. Applicant's arguments filed 17 February 2009 have been fully considered but they are not persuasive. Applicant argues:

> With respect to claim. 17, rejected by the Examiner under 35 U.S.C. §103(a) as being unpatentable over *B-E-H,* as applied to claim 9 above, in view of *Hartranft,* Applicants respectfully submit that *Hartranft* fails to cure the deficiencies of *B-E-H* with respect to amended independent claim 9, which claim 17 depends from, as discussed above.

However, note that while Hartranft does not disclose all the features of the present claimed invention, Hartranft is used as teaching reference, and therefore, it is not necessary for this secondary reference to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather this reference teaches a certain concept, namely adding biocide to the reinforcing layer, and in combination with the primary reference, discloses the presently claimed invention.

Conclusion

32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES YAGER whose telephone number is (571)270-3880. The examiner can normally be reached on Mon - Thurs, 7:30am-5pm, EST, Alt. Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on 571 272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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JY 3/18/09

/Callie E. Shosho/
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